

Figure 1

Section Number	Description
0	Null (Operation code: 0), or no action
1 (includes 1a & 1b)	Controls (Operation code: 1-100) Section (1a): Fundamental descriptions of Controls Section (1b): Flow Controls
2	Data Access (Operation code: 200-299)
3	Math Operations (Operation code: 400-499)
4	Transforms/Actions (Operation code: 500 and up)

Figure 2

Section Number	Command Name	Operation code	Argument 1	Argument 2	Argument 3	Argument 4	Description
0	0	0	--				Example: 0 Meaning: Null, or no action
1a	Begin_Tigger	1	ID_Trigger				Example: Begin_Trigger(1) Meaning: Start trigger and Give it an ID
	End_Trigger	2	--				Example: End_Trigger Meaning: Stop Trigger
	Begin_Action	3	ID_Event	ID_Object			Example: Begin_Action(1,1) Meaning: Start Action, give it an ID and refer the Action to an Object
	End_Action	4	--				Example: End_Action Meaning: Stop Action

Fig. 3a Illustration of Section (0) and Partial Itemization of Section (1a) of the BDT Language.

Section (0): Null

Section (1a): Fundamental descriptions of Controls.

Section Number	Command Name	Operation code	Argument 1	Argument 2	Argument 3	Argument 4	Description
1b	For	10	Variable	Number of frames			Example: For(x,2) Meaning: Iterate to execute the action in the 'for' nest twice and offer the variable, x, for further use.
	End_For	11	-				Example: End_For Meaning: Stop For
	If	12	Variable	Constant			Example: If(x,1) Meaning: If x equals 1, then execute the following action.
	End_If	13					Example: End_If Meaning: Stop If
	If_Property	14	Property	Constant			Example: If_Property(property,1) Meaning: If variable equals 1, the certain notation of 3D property, then execute the following action.
	End_If_Property	15					Example: End_If_Property Meaning: Stop If Property
	If_Event ** See remark below.	20	Event				Example: If_Event(event) Meaning: If the event is true, then execute the following action.
	End_If_Event	21					Example: End_If_Event Meaning: Stop If_Event
	Do	50	ID_Action				Example: Do 1 Meaning: Execute the action 1.

** Remark: Description of the values for the opcode 20.

Value of the opcode 20	Description
1	mouse_click
2	time
3	distance
4	proximity

Fig. 3b Illustration of Partial Itemization of Section (1b) of the BDT Language.
Section (1b): Flow Controls.

Section Number	Command Name	Operation code	Argument 1	Argument 2	Argument 3	Argument 4	Description
2	Get	200	Variable				Example: Get(x, property) Meaning: Get the certain property of the object and put it in the variable x.
3	Add	400	Variable	constant			Example: Add(X,3) Meaning: $X=X+3$
	Subtract	401	Variable	constant			Example: Subtract(X,3) Meaning: $X=X-3$
	Multiply	402	Variable	constant			Example: Multiply(X,3) Meaning: $X=X*3$
	Divide	403	Variable	constant			Example: Divide(X,3) Meaning: $X=X/3$
4	Rotate	1001	X coordinate	Y coordinate	Z coordinate	Angle	Example: Rotate(x,y,z,theta) Meaning: Rotate the object in the theta degree around the normal vector (x,y,z)
	Move_Vector	1010	X coordinate	Y coordinate	Z coordinate		Example: Move_Vector(x,y,z) Meaning: Move the object from original position to the (x,y,z).

Fig. 4 Illustration of Partial Itemization of Section (2), Partial Itemization of Section (3) and Partial Itemization of Section (4) of the BDT Language.

Section (2): Data access.

Section (3): Math operations.

Section (4): Transforms/Actions.

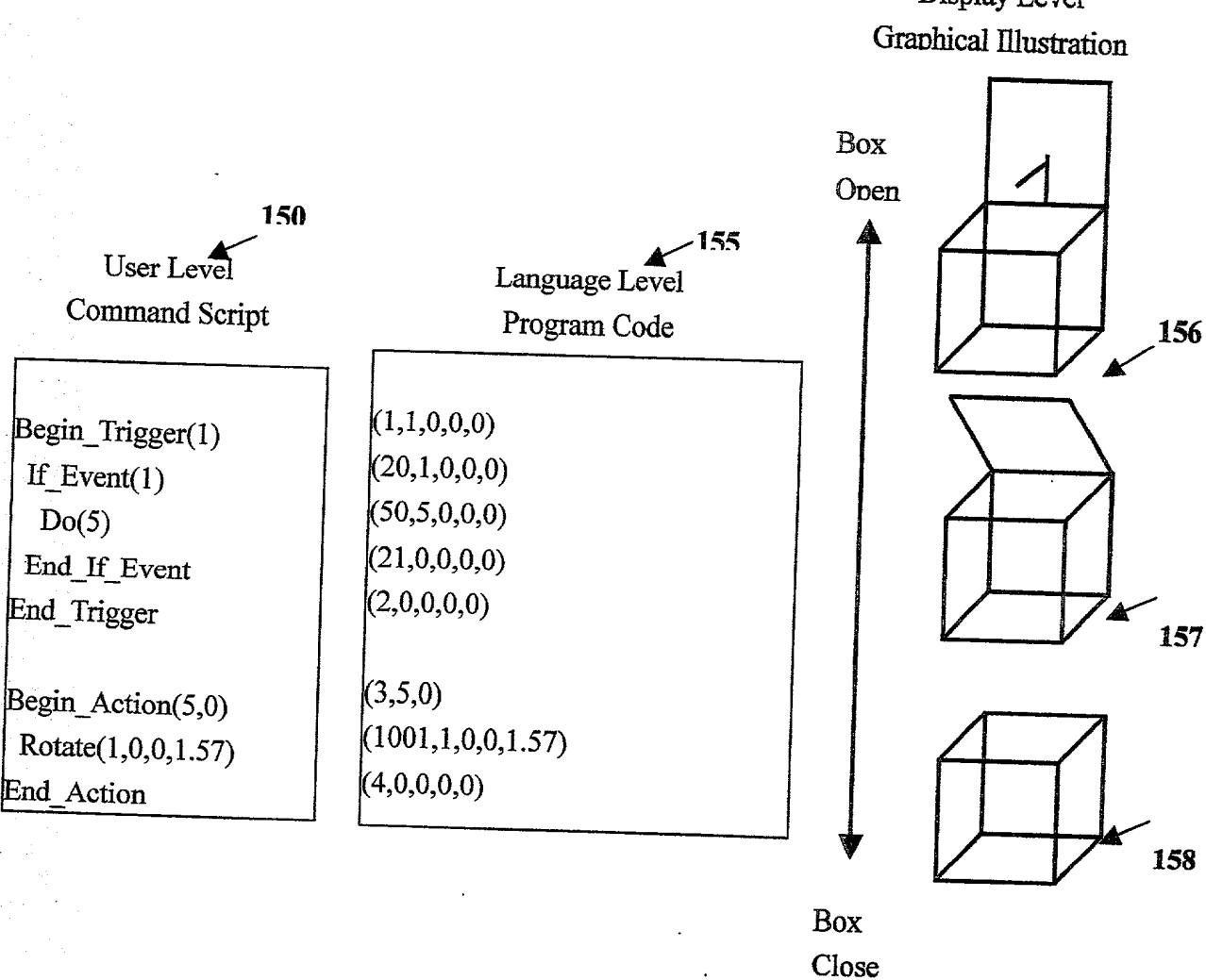


Figure 5

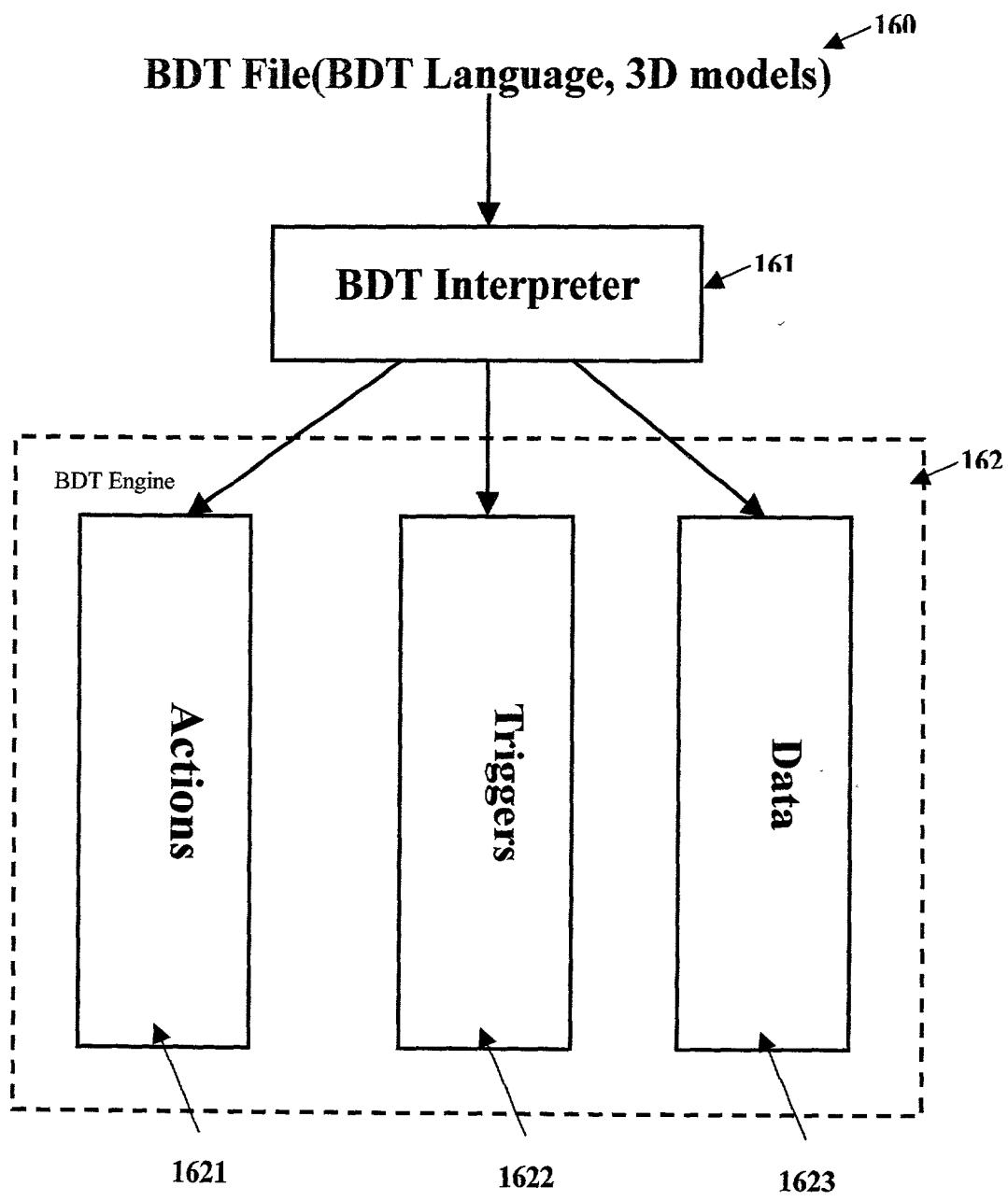


Figure 6